EXHIBIT A

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METHOD FOR PRODUCING A SPECIFIC ANTISERUM AGAINST THE UNIVERSAL TUMOROUS ANTIGEN AND METHOD FOR DIAGNOSING MALIGNANT TUMOURS USING SAID ANTISERUM.

CROSS REFERENCE TO RELATED APPLICAITONS

Applicants claims priority under 35 U.S.C. §119 of Russian Application No. 98106976 filed April 20, 1998. Applicants also claims priority under 35 U.S.C. §120 of PCT/RU98/00143 filed May 18, 1998. The international application under PCT article 21 (2) was not published in English.

FIELD OF INVENTION

The present invention pertains to the field of medicine, particularly to oncology, its spheres and diagnosing malignant tumors.

BACKGROUND OF INVENTION

A brief review of immunodiagnosis in the oncology shows the following.

In 1949 it was first mentioned by L.A. Zilber and in 1957 it was proved by T. Pran and G. Main that malignant cells have their own antigens.

According to Abilev there are 4 groups of antigens.

1) Viral tumorous antigens. They are identical for any viral tumor of this type.
2) Carcinogenic tumorous antigens. They are individual for patients as well as for tumors.
3) Isoantigens of transplantation type or tumorous-specific transplantation antigens. They are different in all individual types of tumors, inducted by chemical agents. And they are the same in different tumors caused by the same virus.
4) Embryonic antigens.

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During the process of carcinogenesis, cells are put to dedifferentiation, thus they acquire an embrional structure. In them there are to be found embryonic antigens, specific to embryonic development of organisms. These antigens can immunize the organism against tumors. The more studied antigens are the following: α-fetoprotein and cancer embryonic antigen (CEA). The former is to be found by carcinoma of the liver, the latter - by adenocarcinmoma of the intestine, stomach, esophagus and pancreas.

Children having neuroblastoma, lymphosarcoma or tumor of the brain have α_2 - fetoprotein. Those who have carcinoma of the stomach have - fetal sulfoglycoprotein.